

Amendments to the Specification:

Please amend the abstract on page 23 as follows:

~~There are provided a~~ A magnetic sensor includes a pair of serially-connected magneto-resistive elements (1a, 1b), one of which serves as a sensing portion (6) made to face a magnetic detecting medium (S), and the other of which serves as a temperature-compensating portion (7). ~~[[;]] The~~ magnetic sensor also includes a magnet (5) that gives magnetic biases having different types of magnetism to the magneto-resistive elements (1a, 1b). ~~[[;]]~~ and a detection circuit (8) that applies DC voltage to between ends of the serially-connected magneto-resistive elements (1a, 1b) and detects a potential change of the common connection point of the magneto-resistive elements (1a, 1b).